



Aviation Education News



Distributed Quarterly to Promote Aviation Education and Awareness in Virginia

November 2003

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Fall Aviation Education Programs Ready for Students and Teachers

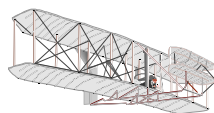
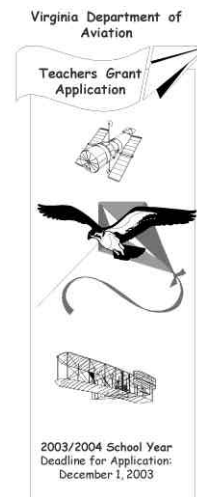
2003/04 Aviation Teachers Grant Applications are Now Available

The 2003/04 Virginia Department of Aviation Teachers Grant Program offers grants of up to \$250.00 to public school teachers in grades K-12. The grants must be used to purchase materials for or otherwise support lesson plans that utilize aviation concepts.

Aviation can be integrated into almost any subject to motivate students to learn and teachers from many different disciplines have benefited from these grants in previous years.

The deadline for application is December 1, 2003.

Application forms will be mailed to schools in October or visit the Department of Aviation's web site (www.doav.state.va.us) for more information.



**Centennial of Flight
Commission
Website**

www.centennialofflight.gov

**How will your school, class,
or organization be
celebrating the
Centennial of Flight?**

**Send us a note and
we'll include your ideas
in future newsletters.**

2004 International Aviation Art Contest Theme is "Flying Saves Lives"

Brochures for the 2004 International Aviation Art Contest will also be mailed to schools in October or can be obtained by visiting the Virginia Department of Aviation's web site (www.doav.state.va.us) or contacting the Department.

The competition is open to students ages 6-17.

Artwork with the theme "Flying Saves Lives" must be postmarked by January 10, 2004.

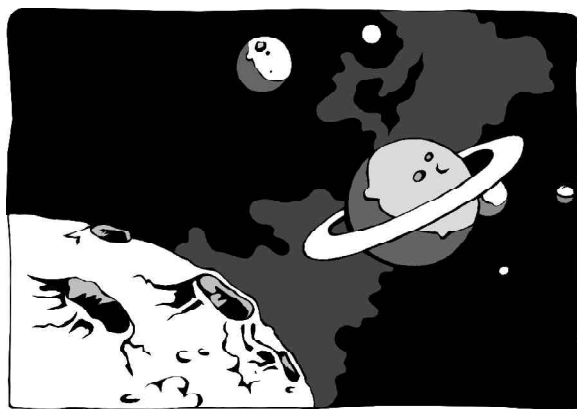


PRESIDENT'S NOTES

The NASA Langley Research Center's Office of Education (OEd) is working in collaboration with the Virginia Department of Aviation which is an excellent way to maintain two communication between federal and state aviation education concerns.

NASA Langley is anticipating providing a 1-week teacher NASA Explorer Schools Summer Workshop for 5th - 9th grade (7/11-17/04). This program is open to public and private school teachers. This is a team-based approach for participants form a county or city. The date that applications will be due is tentatively February 20, 2004. We are also conducting two 2-week pre-service NASA Education Workshops (Pre-Service Teacher Institute) for teacher candidates from colleges and universities. For information on the Pre-Service Programs go to <http://edu.larc.nasa.gov/pstp>. The first session will be June 21 - July 2, 2004 and the second session will be July 19 - 30, 2004. There will be a total of 25-teachers and 40-teacher candidates that will be participating, here at NASA Langley. There are 10-NASA Centers nationwide, so there will be at least 10-core pilot programs. They will provide 250-teachers nationwide an opportunity to participate in an all expenses paid 1-week workshop, with graduate credit available at in-state tuition.

Peter D. Thomas
Aerospace Education Project Manager (ViGYAN, Inc.)
Office of Education
NASA Langley Research Center
<http://edu.larc.nasa.gov/>



VASEF AVIATION EDUCATION NEWS is published quarterly in support of aviation education in the Commonwealth of Virginia by the Virginia Department of Aviation.

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VASEF PURPOSE

The Forum is a non-profit organization to promote and foster aviation and space education among public and private schools, colleges and universities, and community and civic groups, and to promote increased public understanding of aviation and space and their economic, social, and career values in our society and in the Commonwealth of Virginia.

Invitation to Apply for the 2004 VAOC Aviation Scholarship

Dear Prospective Scholarship Applicant,

On behalf of the Virginia Airport Operators Council (VAOC), I would like to express my appreciation for your interest in the John R. Lillard VAOC Scholarship Program.

The scholarship you are seeking is named for a friend, aviation enthusiast and great humanitarian. Through his leadership positions with the Capital Region Airport Commission (which operates Richmond International Airport), Chesterfield County Airport, and Eastern Airlines, John always displayed a zeal and thirst for life, aviation, family and friends. Because of his great spirit, we seek to share and commemorate his unique and special gifts with others. It is also through the kind and generous support of many of the members of the VAOC that this scholarship program is available to assist future aviation leaders as well as honor John. To this end, I am honored that you are contemplating applying for our 2004 scholarship award in the amount of \$1,500.00.

Attached please find a copy of our application for your review and information. In order for your application to be considered, you must be a Virginia high school senior, have at least a 3.75 unweighted GPA; must be planning a career in the field of aviation, and must be enrolled or accepted into an aviation related program at an accredited college. It is also necessary for you to:

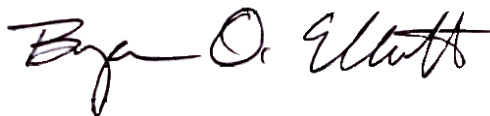
1. Complete the attached application.
2. Have your guidance counselor or other high school official sign all required certifications.
3. Attach an official copy of your current high school transcript and a copy of acceptance letters or other verification of enrollment or acceptance into a post-secondary institution.
4. Attach to the application a typed, double-spaced essay (350 word minimum/500 word maximum) on the subject: "Why I Wish to Pursue a Career in Aviation."
5. Attach recommendation letters (no more than three) and a typed (one-page maximum) sheet listing both school-related and extracurricular activities demonstrating accomplishments and leadership capabilities.
6. Mail all documents to: **VAOC Scholarship, c/o Virginia Aviation and Space Education Forum, Attn: Betty Wilson, 5702 Gulfstream Road, Richmond, VA 23250-2422.**

The deadline for receipt of applications with all documentation is Friday, February 20, 2004. Applications will be evaluated as follows: 35% Scholarship (GPA), 30% Essay,

20% Accomplishments and Leadership and 15% demonstrated financial need for scholarship.

Thank you again for your interest in the John R. Lillard Virginia Airport Operators Council Scholarship Program. Best wishes for continued success in your academic endeavors.

Sincerely yours,



Bryan O. Elliott, A.A.E.
Chairman
2004 John R. Lillard VAOC
Scholarship Committee



Virginia Airport Operators Council

John R. Lillard
Aviation Scholarship Program Application

Award Amount: \$1,500.00

Applicant Information:

Name: _____ Home Phone: (____) _____

Mailing Address: _____

High School Information:

Name of High School: _____

Address: _____

Telephone Number: (____) _____ Date of Graduation: _____

High School Certification:

As verified by the attached high school grade transcript, I hereby certify that the above named student has maintained at least a 3.75 GPA in all completed courses to date.

Name and Title of High School Official (Typed or Printed) _____ Signature and Date _____

Post Secondary Acceptance Certification:

As verified by enclosed documentation, I hereby certify that the above named student is enrolled in or accepted for enrollment in the

_____ program at _____
(Accredited institution)

Name and Title of High School Official (Typed or Printed) _____ Signature and Date _____

Statement of Financial Need:

Describe why you need this scholarship: _____

Mail application and attachments to: VAOC Scholarship, c/o Virginia Aviation and Space Education Forum, Attn: Betty Wilson, 5702 Gulfstream Road, Richmond, VA 23250-2422.

Rotary Aviation Career Day at Richmond International Airport

The eighteenth annual Rotary Aviation Career Day will be held at Richmond Jet Center on Richmond International Airport Wednesday, October 29, 2003 from 9:00 a.m. - 2:00 p.m.

The event includes aviation career related presentations, facility and operations tours, aircraft static displays, aviation equipment and information displays. A special featured speaker will open the program.



Approximately 200 aviation-oriented high school students and 20 counselors from thirty area high schools will participate this year. Since the inception of the program approximately 3500 students and counselors have benefited from the project.

Five Rotary Clubs located near Richmond International Airport sponsor the event with cooperation and support from the Greater Richmond aviation and school communities and the Federal Aviation Administration.



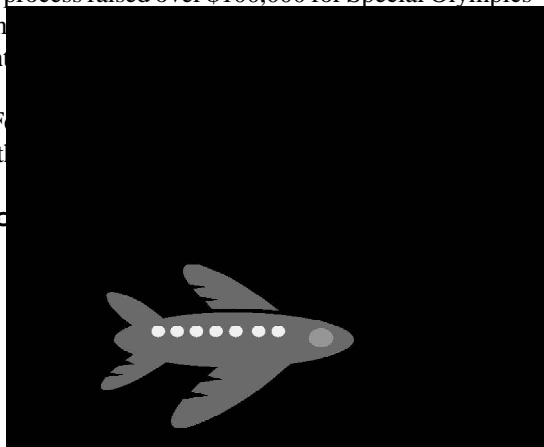
Dulles Plane Pull Proceeds Despite the Effects of Isabel

The 11th Annual Dulles Day Family Festival and Plane Pull was held at Dulles International Airport on Saturday, September 20th.

Fifty-six registered pulling teams (made up of 1140 individuals) took turns dragging a Boeing airliner and in the process raised over \$100,000 for Special Olympics Virginia. The fastest team across the finish line was Signature Flight, and the slowest team was Signature Flight.

The Dulles Day Family Festival was held at the Washington Airports Authority.

For more information about the event, visit the website at www.dullesday.org.



National Air and Space Museum Calendar

Wednesday, November 5, 2003, 8:00 p.m. Voyager at 90 AU

On Aug. 20 and Sept. 5, 1977, NASA launched two Voyager spacecraft to study the outer planets. Join Voyager team members - professors Edward C. Stone, Caltech, Pasadena; Gary Zank, University of California, Riverside; and Edward Massey, Voyager Project Manager, NASA's Jet Propulsion Laboratory, Pasadena - to rediscover the project's milestones and future.

Lecture is free, but tickets are required. Tickets can be obtained at the Lockheed Martin IMAX Theater Box Office, and through Tickets.com by calling 800-529-2440, or through the web site at www.tickets.com. There is a small service fee on all Tickets.com orders. Tickets may also be reserved, with no charge, by calling 202-633-2398, or by e-mailing lectures@nasm.si.edu.

Thursday, November 20, 2003, 8:00 p.m. The General Electric Aviation Lecture Series

An Evening with Former Test Pilot Scott Crossfield

A. Scott Crossfield has enjoyed a distinguished career as test pilot, engineer, and manager. Today his contributions and accomplishments pervade almost every facet of the aviation world. This evening marks the 50th anniversary of perhaps his most historic feat. In 1953, flying the rocket-powered Douglas D-558-II, he became the first pilot to exceed Mach 2. Currently, he is Director of Flight Operations for the Wright Experience. This project will culminate in the flight of a reproduction of the Wright brothers' 1903 Flyer at Kill Devil Hills, N.C. December 17, 2003.

See above lecture for ticket information.

For more information visit:
www.nasm.si.edu.

Opening in December 2003: National Air and Space Museum Steven F. Udvar-Hazy Center

Located at the Washington Dulles International Airport, the Udvar-Hazy Center will house 200 aircraft and 135 large space artifacts including the Space Shuttle Enterprise, SR-71 Blackbird, and B-29 Superfortress Enola Gay.

ISABEL CRASHES VIRGINIA STATE EAA FLY-IN PARTY

Most Agree With Decision to Continue Event

After Hurricane Isabel swept through eastern North Carolina on September 18, it cut a swath of destruction through Central and Tidewater, Virginia, nailing Dinwiddie County Airport (PTB) with 75 mph winds and driving rain. The Virginia State EAA Fly-in Board decided before the hurricane hit that it would not cancel their September 20-21 event unless absolutely necessary. Although many volunteers had no power at home, had trees down and other storm damage, most showed up as scheduled to pitch in and make the fly-in happen.

The mood throughout the weekend was incredibly upbeat, with most agreeing with the decision to hold the fly-in. Yearlong preparations resulted in a safe, albeit smaller, fly-in. That EAA "can-do," spirit was evident throughout the weekend. Attendance was about 35 percent of the 2002 fly-in, which is remarkable considering the conditions: The storm knocked out power at the airport and damaged some T-hangars; most area hotels and motels lost power and water services; and an unprecedented 80 percent of state residents were without electricity at some point, according to media reports.

Isabel struck PTB on Thursday, September 18-the scheduled "set-up day"-forcing a skeleton crew to work until dark on Friday. Saturday dawned with beautiful flying weather as final preparations continued. The pancake breakfast started right on schedule at 8 a.m. with a small generator powering the refrigerators and large, 300-pound blocks of ice. By mid-day, the ramp was full of airplanes and cars filled the main parking lot. Two shuttles, including a marvelous new design built by EAA Chapter 231's Cliff Martin, transported RV campers, volunteers, and some ultralight pilots from the west side of the field to the main ramp. Some forums had to be canceled due to a lack of power, but on Sunday, one of the vendors parked his RV next to the Exxon forum tents and provided power for projectors and AV equipment.

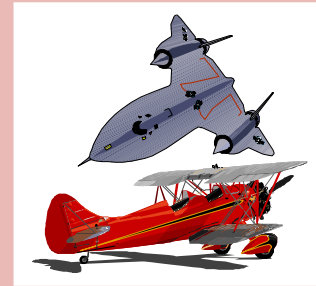
Sunday's ground fog cleared a couple of hours after sunrise, clearing the way for more planes. Wet, saturated grounds severely affected the powered parachute and ultralight areas as Isabel's rains re-soaked the already wet field and prevented tent camping. However, the new ultralight runway, raised well above the surrounding area, was in excellent shape and saw many takeoffs and landings.

The afternoon air show went on as scheduled when required emergency services, understandably busy with Isabel-related duties, returned to PTB just in time.

Performers included the John Deere Flying Lawn Mower from the Hardee's Air Show Team; the Split Image Pitts Aerobatic team; Charlie Schwenker smoking the sky with his Extra 300; and the return of Charlie Kulp's Flying Farmer, a fixture for decades in Central East Coast air shows.

The public address played Happy Birthday for Charlie, who turned 78 on opening day.

Prize drawings were held after the air show for Bobby Clarke's beautifully crafted and painted Christen Eagle pedal airplane; a Garmin 195 GPS; and an ICOM A-22 Nav-Com. In addition, three pilot's names were drawn for oil cooler overhaul coupons provided by Pacific Oil Cooler Services.



VIRGINIA AVIATION MUSEUM CALENDAR

November 1, 2003

Wright Brothers Symposium

Experts in the field of aviation history discuss the fascinating process that led to man's ability to fly. See full-size reproductions of the Wright 1899 kite, 1900, 1901, and 1902 gliders, and the 1903 Flyer.

9:30 a.m. - 5:00 p.m.

November 20, 2003

Guest Speaker's Series

Bryce Van Stavern will discuss the scientific processes the Wrights' used to create and improve their 1900, 1901, and 1902 gliders.

7:00 p.m.

December 17, 2003

First Flight Celebration

Special hands-on activities and films honoring the first manned, powered, controlled flight made by the Wright Brothers on December 17, 2003.

10:00 a.m. - Noon

December 17, 2003

The Wright Path

Celebrate 100 years of flight! Don't miss this wonderful opportunity to discover how the Wright brothers built the world's first successful airplane, the 1903 Wright Flyer. First explore the scientific processes the Wrights used to create and improve their 1900, 1901, and 1902 gliders. For times throughout the day, please call 804-236-3622.

For further information on events and schedules, call (804) 236-3622.

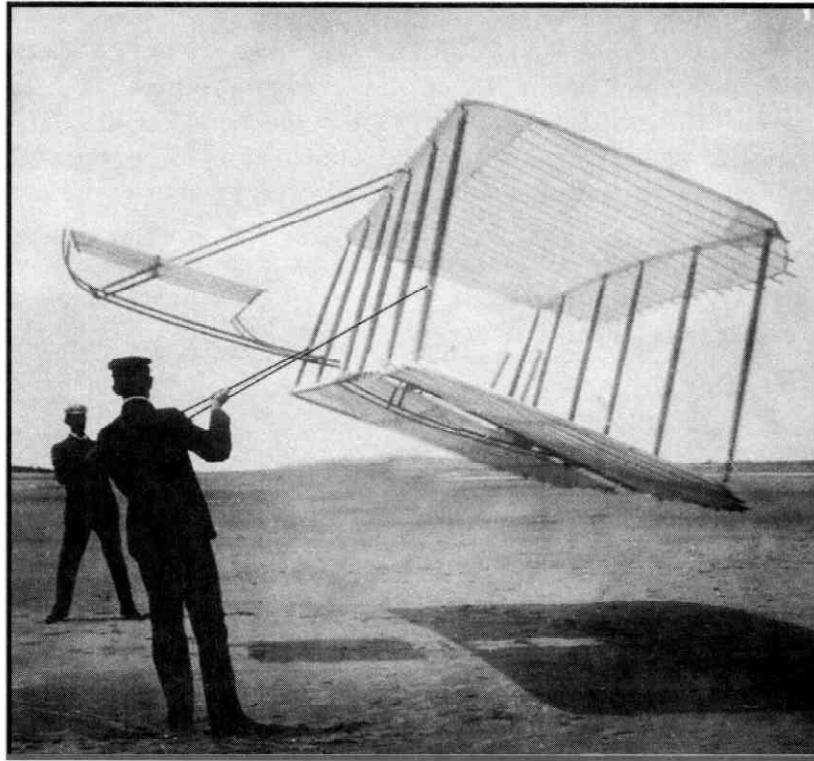


Judy Sparks, Fly-in Manager, holds box for Michael Iazzi of Powhatan, VA, to draw winning ticket for the Christen Eagle pedal plane.

Aviation Education Corner

Activity 8—Forces on the 1901 Glider

The picture below shows the Wright Brothers at Kitty Hawk, NC, with their 1901 Glider being flown as a kite. It weighed 98 pounds and had a wingspan of 22 feet. The kite appears to be floating in the air, but it is actually being held motionless because the forces that are acting on it are “balanced.”



1. You know that wind is needed to fly a kite, so draw an arrow on the picture to show which way the wind would be pushing on the glider.
2. There are three other forces that are acting on the kite. One of these is the lift caused by the wind acting on the wings of the glider. Draw an arrow to show the direction that this force acts on the glider.
3. The third force acts on you and all other objects on Earth all the time. It is called _____. Draw an arrow to show the direction that this force acts on the glider.
4. Look at the men in the picture and see if you can determine the direction of the fourth force. Keep in mind that the glider is motionless, so the fourth force must act to balance out the other three forces. Draw an arrow to show the direction of the fourth force.
5. Do you see anything in the picture that shows that all the forces are canceling each other out? If yes, what is it?
6. If the speed of the wind increased, what would happen to the glider?

National Air Tour Visits Richmond

The 2003 National Air Tour arrived at Richmond International Airport on the morning of Sunday, September 21. Even though the stop at Richmond was brief (for fuel, some refreshments, and a quick tour of the Virginia Aviation Museum), a crowd of aviation enthusiasts gathered to welcome the pilots and aircraft.

The ideal way to learn about the history of aviation is to see it firsthand and the crowd at Richmond wasn't disappointed. Once the aircraft were fueled, visitors were invited to venture out to the ramp, see the aircraft close-up, and talk with the pilots.

About the Air Tour

In the mid 1920's, at a time when there was not even a single road reaching across the United States, air travel was beginning to unite the country. In capturing this spirit, the National Air Tours were conceived in 1925 to demonstrate the reliability of air travel, to encourage the development of safe and reliable aircraft and to promote the building of suitable airports and ground facilities. The tours became one of the most successful promotional efforts of the 20th century.



A Sikorsky Flying Boat sits in front of Richmond's new Air Traffic Control Tower.



1929 Alexander Eaglerock

The 2003 National Air Tour gave people a chance to see more than two dozen vintage aircraft from the 1920's and 1930's, including Ford Tri-motors, Stinson Tri-motors, and aircraft with romantic old names like Travel Air, WACO, Paramount, Curtiss, New Standard and Eaglerock. There were biplanes, monoplanes, and flying boats, all harking back to the Golden Age of Aviation.

The tour finished its circuit of 26 cities on Wednesday, September 24 when the group arrived at Willow Run Airport in Dearborn, Michigan. They had flown over 4000 miles in 17 days and introduced a whole new generation to these beautiful aircraft of the past.



Overhead view of aircraft of the 2003 National Air Tour.

SCIENCE MUSEUM OF VIRGINIA CALENDAR

EXHIBITIONS

Grossology: The (Impolite) Science of the Human Body - Sept. 27-Jan. 4
Mary Morton Parsons Earth-Moon Sculpture (kugel) - Permanent

MAX FILMS

The Human Body - thru Jan. 9
Extreme - thru Jan. 9
Lewis & Clark: Great Journey West - thru Jan. 9

MULTIMEDIA SHOWS

Follow that Star! Celestial Navigation - thru Jan. 11

LIVESKY: Informal "live" planetary presentation of the month's celestial events. Third Friday of every month (except Oct.)

SKYWATCH: Third Friday of every month (weather permitting) on the front lawn.

24-Hour Information: (804) 367-0000
Box Office: (804) 367-1080
24-Hour Skywatch Information: (804) 367-8277
24-Hour TDD Information: (804) 367-9760
General Information - TDD: (804) 367-6552
Group Scheduling: (804) 367-6552
Home Page: <http://www.smv.org>

VIRGINIA AIR AND SPACE CENTER CALENDAR

EXHIBITS:

1903 Wright Flyer
The Wright Brothers' Propeller Exhibit
Orville & Wilbur: The Wright Brothers Legacy Exhibit - Nov. 1, 2003 thru January 11, 2004
Before the Wright: The Dream of Flight - October 3 thru January 1, 2004

IMAX FILMS:

Ghosts of the Abyss
Adrenaline Rush: The Science of Risk
Straight Up: Helicopters in Action
Bugs
The Matrix Revolutions (beginning Nov. 5)

CENTENNIAL OF FLIGHT LECTURE SERIES:

Inventing Flight: The Science of Balloons, the Technology of Wings
Tom Crouch
November 5, 2003, 7:00 p.m.

A personal account: First Family of Aviation - The Wrights
Betty Geiger-Darst
December 3, 2003, 7:00 p.m.

Call (804) 727-0900 for showtimes
Visit the Center's Home Page:
<http://www.vasc.org>

Calendar of Events

December 9, 2003

Virginia Aviation Board Workshop will be held beginning at 3:00 p.m. at the Massey Building, 5707 Huntsman Road, Richmond International Airport, Virginia. No formal actions by the Board will be taken at the workshop. All formal actions will take place during Virginia Aviation Board meetings. Schedule and meeting place subject to change - for additional information contact Carolyn Toth, Administrative Assistant, at 804-236-3637.

December 10, 2003

Virginia Aviation Board Meeting will be held beginning at 9:00 a.m. at the Massey Building, 5707 Huntsman Road, Richmond International Airport, Virginia. Schedule and meeting place subject to change - for additional information contact Carolyn Toth, Administrative Assistant, at 804-236-3637.

December 17, 2003

100th Anniversary of Powered Flight. For information on centennial events visit the First Flight Centennial web site (www.centennialofflight.gov).

To order tickets to Centennial Events at Kitty Hawk, North Carolina visit www.wrightbrothers.reserveworld.com/.

For more events visit: <http://www.doav.state.va.us/calendar.htm>.

Aviation Education Supporters:

VASEF projects are funded by our membership fees and by donations from our member organizations. We would appreciate your support through membership in our organization.

_____ Regular Membership \$25.00 annually (July - Dec. \$12.50)

_____ Non-Profit Organization \$25.00 annually (July - Dec. \$12.50)

_____ Corporate Membership \$100.00 annually (July - Dec. \$50.00)

_____ New Member _____ Renewal

Date: _____

Name: _____

Name of Organization: _____

Occupation: _____

Address: _____

City: _____ State _____ Zip _____

Telephone: _____

Please Return to: Tom Tyndall, VASEF Treasurer
5702 Gulfstream Road
Richmond, Virginia 23250-2422



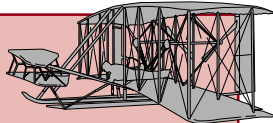
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Inside:

**2004 Teachers
Grant Program**

VAOC Aviation Scholarship



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